

# Arnie's America's Cup Challenge

## The Game

Success in sailing is founded on a 'feel for the sea', teamwork, practice and good judgement. Some say luck too, but we think not. We have included all these elements as the essence of success at playing this game.

We hope you have the 'feel for the sea' some would call luck. Teamwork we translate into joystick skill. Pages of the **ARMCHAIR GUIDE TO THE AMERICA'S CUP** describes a typical 12 metre yacht and its crew. Your joystick becomes your crew. The better a crew works together the better the yacht sails and so, the better you refine your joystick skills the better you and 'your crew' will sail. Practice makes perfect. Good judgement is the challenge that makes people keep striving. Success in 12 metre yachting, and in this game, results from repeated good judgement, learning from one's mistakes and excellent teamwork.

You will load the game into your computer as advised in the supplied instructions, with the initial selections made via the keyboard.

When the game is loaded, you will select either:

- **SINGLE PLAYER** - You're the Challenger, the Computer is the Defender.

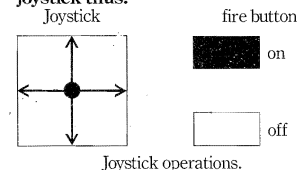
- **TWO PLAYERS** - Players to decide their choice and identify as either the Challenger or Defender.

- **LEVEL OF PLAY** - Your choice of **AMATEUR**, **CLUB RACE** or **AMERICA'S CUP**.

The **COMMODORE** will then announce the **RACE WEATHER CONDITIONS**. **PRESS** the **SPACE BAR** and you will be asked to **CHOOSE YOUR STARTING SAILS**.

If you're careful, your opponent will not be aware of your choice until the race starts.

**SAIL SELECTION** is made using the joystick thus:



Joystick operations.

In the **ARMCHAIR GUIDE TO THE AMERICA'S CUP** we describe the factors affecting the sailing performance (Pages ) and here we describe how you convert your skipper's decisions through your joystick into action.

The **OFFICIAL AMERICA'S CUP COMPUTER GAME** is a realistic graphic recreation of 12 metre yachts sailing and what will need to be done to win the America's Cup. It is immensely realistic in appearance, strategy and player skill. You'll really feel like you're out there pitting wits with the best 12 metre yachtsmen. The rules and regulations are those applied to the America's Cup. The **ARMCHAIR GUIDE TO THE AMERICA'S CUP** specifically details from pages all you will need to know about 12 metre yachts and America's Cup Match racing. The better you apply the theory detailed there the better you'll play the game.

### TO CHOOSE GENOA or SPINNAKER

1. push joystick down then:
2. press fire button: once for light sail, twice for medium sail, three times for heavy sail
3. return the joystick to the centre and press the fire button once.
4. the screen will identify this is **DONE** in the top right or left hand corner.

Play begins with the **PRE-RACE MANOEUVRES**, the **START** and the **RACE OVER THE FULL EIGHT (8) LEGS** of the course as detailed in the **ARMCHAIR GUIDE TO THE AMERICA'S CUP**, page , and in the game's 'demonstration' mode.

N.B: If no selections are made, the game will automatically switch to 'demonstration' mode and stay there until a key is pressed. See supplied instructions.

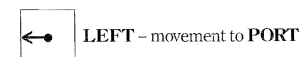
Control of your yacht is by joystick only and you will be kept very busy, so a good quality, robust joystick is suggested.

In game play mode there are **THREE (3)** modes you can be in at any time:

1. **HELMSMAN'S MODE**
2. **SAILS SELECTION MODE**
3. **WINCHING MODE**

Helmsman's mode is the mode used to control the yacht's direction and is the default mode.

Joystick movement to the **RIGHT** or **LEFT** without pressing the fire button, steers the yacht in the **STARBOARD** or **PORT** direction respectively.



When in split-screen mode (the yachts are too far apart to appear on one screen) pressing the fire button in 'HELMSMAN'S' mode causes your side of the split-screen to display the 'mini-course' screen.

## Helmsman's Mode

This mode is selected by pushing the joystick forward and pressing the fire button once.



Once in this mode, these selections produce the following results:

a) **JOYSTICK RIGHT - 'BOOM'** moves towards centre line

b) **JOYSTICK LEFT - 'BOOM'** moves out from centre line

The '**ANGLE OF THE BOOM TO THE WIND**' is critical to the speed of the yacht and with sail choice, represent the major options you have to affect your yacht's performance.

c) **JOYSTICK UP - 'SELECTS SPINNAKER'**

Then each press of the fire button selects one of the available choices:

once for light spinnaker  
 twice for medium spinnaker  
 three times for heavy spinnaker

d) **JOYSTICK DOWN - SELECTS GENOA**

Then each press of the fire button selects one of the available choices:

once for light genoa  
 twice for medium genoa  
 three times for heavy genoa

e) pressing the fire button once with the joystick centred returns you to 'HELMSMAN'S' mode.

## Sail Selection Mode

Once new sails have been selected '**WINCHING**' mode is selected by moving the **JOYSTICK DOWN** and pressing the fire button **ONCE**.



You can then **WINCH SAIL UP** by rotating the joystick:



**CLOCKWISE**

**WINCH SAIL DOWN** by rotating the joystick:



**ANTI-CLOCKWISE**

Winching skill is a combination of speed, judgement and consistent contact with all switches in the joystick. A smooth action produces best results.

Pressing the fire button once with the joystick centred returns you to the 'HELMSMAN'S' mode.



## Winching Mode

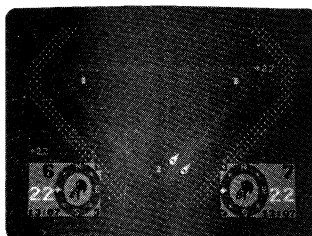
## Play of the Game

# Arnie's America's Cup Challenge

## COURSE SCREENS\*

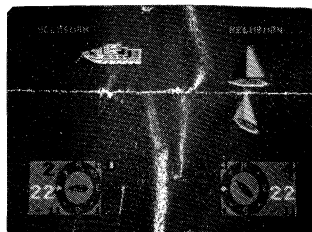
The actual play is represented by FIVE (5) SCREENS

### The Course Screen



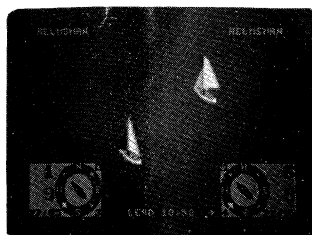
Which from above, identifies the relative position of the yachts on the America's Cup course. During play this screen is automatically called up every minute or so for about 'four (4) seconds', unless some other action interferes.  
**NOTE:** Pay particular attention to any **CHANGES IN THE WEATHER (WIND SHIFTS)**.

### The Start Screen



Identifying **PRE-RACE MANOEUVRING** and the **START BOAT**. This screen scrolls to represent the 'RACE' mode with two (2) yachts sailing around the course.

### The Split Screen

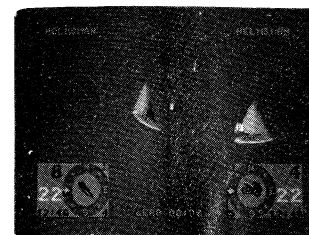


A. Split screen mode

- A. Is automatically created if the yachts are too far apart to appear together on the one screen. The **DEFENDER** is on the **LEFT** and the **CHALLENGER** is on the **RIGHT**.  
B. Each yacht can call up a 'mini-course' screen to identify his relative position by pressing the fire button with the joystick centred in 'HELMSMAN'S' mode.

B. Split mini-course screen

Represents a close view of either or both yachts rounding any 'MARKER-BUOY'. This represents a critical phase of tactical activity with sail changing usually required. This screen takes precedence over all others when a yacht is closely adjacent to any buoy.

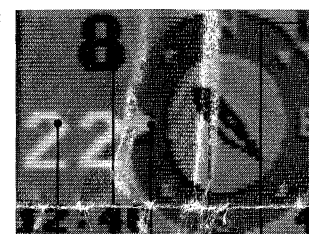


### The Buoy Screen

- You will have on-screen assistance from:  
a) a **MARKER ARROW** identifying the **DIRECTION OF THE NEXT MARKER-BUOY** you are heading for.  
b) **EACH PLAYER** has a dial identifying his:  
- wind speed and direction  
- boat speed and direction  
- elapsed time for the race  
- current leg of the race.  
c) '**MESSAGES**' appear on the screen identifying changes in conditions or sails related to the current race. Concentration is critical, particularly in identifying 'wind shifts', or tactical moves by your opponent.

You have the same information to make tactical decisions that 12 metre yachtsmen do, so good sailing.

Remember, the **ARMCHAIR GUIDE TO THE AMERICA'S CUP** provides most of the information you need to be a successful skipper. The '**SINGLE PLAYER**' mode allows you to practice and develop skill.



Wind Speed  
Boat Speed  
Yacht Direction  
Current Leg of Race  
Elapsed Time  
Wind Direction  
Buoy Direction

### During Play

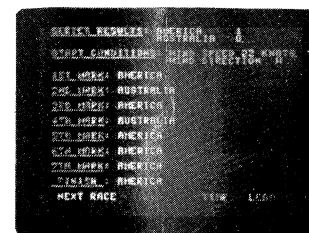
After each race is over, the '**RACE RESULTS**' will appear.

Using the joystick in an '**UP/DOWN MOTION**' you select your choice, then press the fire button to get:

1. **RACE RESULTS** - full results of the last game in the series and the series status. You then decide either 2 or 3.
2. **NEXT RACE** - starts the next race in this series.
3. **NEW SERIES** - clears out the old series and starts a new series.

If no action is taken after loading of the game or after selecting 2 or 3, a '**DEMONSTRATION**' mode will commence and continue until the '**SPACE BAR**' is pressed.

(Defaulting to '**DEMONSTRATION**' mode will mean the starting of a new series.)



### Race Results

\*Pictures are taken from the Commodore 64 version.

# Yachting terms – what they all mean

THE America's Cup is the ultimate yacht race. It has captured the imagination of people who like watching nations, yachts and individuals tussle in a race every competitor has a realistic chance of winning.

The amazing thing about the America's Cup is that it is followed worldwide by millions of people who know very little about sailing.

Your **Armchair Guide** to yachting language will make this great spectacle easy to follow and very enjoyable. We hope the Guide lets you become an armchair expert.

## Glossary

**Abeam:** Anything abeam is straight out from either side of the yacht.

**Aft:** At the rear.

**Astern:** Behind the yacht.

**Backstay:** Wire that runs from the top of the mast to a point on the stern. Used to tension the mast slightly backwards.

**Bear away:** Alter course away from wind.

**Bearing:** Direction the yacht is going.

**Blanketing:** Sailing between your opponent and the wind, giving him "dirty air" from your sails.

**Boom:** Aluminium or kevlar spar attached to the foot or bottom edge of the mainsail.

**Bow:** Front section of the yacht.

**Brace:** Rope or wire that controls the angle of the spinnaker pole to the wind.

**Broad reach:** Sailing with the wind coming from the side.

**By The Lee:** Sailing downwind (wind behind) at an angle where the sails could be set on either side of the yacht. It means sailing in a position beyond the present tack without gybing.

**Coaming:** Edge of the yacht where hull and deck join.

**Clew:** Corner of the sail on which the sheets (ropes) are tied.

**Close hauled:** Sailing as close as possible to the direction of the wind.

**Coffee Grinder:** The big winch with pedal type handles.

**Come about:** Bring the bow across the eye of the wind until the sails fill on the other side. Also known as tacking.

**Come up:** To point the bow of the yacht "up" towards the direction of the wind. Going "up" is into the wind. Going "down" is away from the wind.

**Covering:** Getting in front and staying between your opponent and the eye of the

wind, creating a wind shadow. No matter which way he tacks, you go with him. He cannot sail past you through this wind shadow.

**Crane:** The mast crane is the alloy arm at the top of the mast holding up the wire mainsail halyard and the wire backstay.

**Cross-trees:** Supports on the mast to keep the wire rigging steady.

**Dead square:** Sailing with wind right behind, with the mainsail out to one side.

**Dirty air:** Disturbed air from the leading yacht hitting the sails of the following yacht. Causes dramatic loss of speed.

**Downhill:** Sailing with the spinnaker up and the wind behind.

**Downwind:** Same direction as downhill. Away from the wind.

**Ease sheets:** Slacken off the ropes that adjust the sails.

**Falling Off:** Heading slightly away from the wind to pick up speed for tactical reasons.

**Foot:** The bottom edge of a sail.

**Footing:** Sailing slightly below the optimum angle of the wind.

**Foredeck:** Section of deck between mast and bow.

**Forestay:** Tensioning wire running from bow to masthead.

**Genoa:** Large front sail that overlaps the mainsail.

**Gooseneck:** Fitting attaching mainsail boom to mast.

**Grind:** Winding the handles to operate the huge winches.

**Grinder:** The big winch operators, commonly called "gorillas" because of the strength needed in this position.

**Gybe:** Changing direction when the wind is behind. The sails swing from one side of yacht to the other.

**Halyard:** Wire or rope used to hoist sail up the mast.

**Harden up:** Pull the sails tighter and change direction towards the wind.

**Header or knock:** Wind shift that enables yacht to tack to a slightly better line for the next mark.

**Heeling:** Way in which yacht leans to one side in the wind.

**Helm:** The steering wheel, or tiller.

**Jib:** The triangular headsail that provides acceleration power.

**Lay line:** Imaginary straight line a yacht follows to each mark.

**Leech:** The trailing edge of a sail.

**Lee-bow:** To tack into a position slightly ahead and slightly to leeward of your opponent. An advantageous but risky manoeuvre.

**Leeward:** Side away from the wind.

**Luff:** The leading edge of sails. The luff flaps when the bow goes too close to the wind direction.

**Luffing:** When the sail flaps because the yacht is too close to the wind.

**Mainsail:** The rear sail that is attached to a track up the mast and to the mainsail boom.

**Mainsheet:** Rope that controls the mainsail.

**Masthead:** Top of the mast.

**Over-ride:** When the turns of rope around a winch run one over another. With several tonnes of pressure on the winch, an over-ride is a big problem, jamming the sail position.

**Pinching:** Sailing slightly above the optimum angle on the wind.

**Pointing:** Aiming the bow as far as possible into the wind.

**Pole:** Also called the spinnaker boom. A pole attached to the mast and spinnaker, to hold the spinnaker at the correct angle to the wind.

**Port:** Left side.

**Port tack:** When the wind comes from the left, with sails leaning to the right.

**Reaching:** When the sails are eased, with the wind coming from one side.

**Running:** Sailing with the wind behind.

**Sheets:** Ropes that tighten and loosen the sails.

**Shooting:** Tricky tactic when you can't quite make a mark. Means temporarily heading the yacht into the wind and luffing (sails flapping) above your course, and relying on the boat's momentum to 'shoot' around a mark. This avoids making a short tack at mark, but must be done skilfully, as the yacht rapidly loses speed.

**Shrouds:** Wires on each side of the yacht holding the mast up.

**Spinnaker:** Big, full sail that billows out the front when the wind is from behind.

**Spreaders:** Supports on the mast to keep the wire supports steady. Also known as cross-trees.

**Starboard tack:** When the wind is coming from the right, with the yacht and sails leaning to the left.

**Stays:** Wires running from top of mast to bow (forestay) and top of mast to stern (backstay). They prevent the mast falling forward or backwards. The backstay also controls the degree of bend in the mast.

**Stern:** Rear end.

**Tack:** Front bottom corner of a sail.

**Tacking:** When the yacht swings through the wind's eye and the sails swing from one side to the other.

**Tactician:** He works out the Match Racing tactics and constantly advises the skipper what is happening.

**Tail:** Rope attached to the end of a wire halyard.

**Tailing:** To pull tighter on a sheet (rope) wound around a winch.

**Tender:** Fast powerboat carrying syndicate managers, advisers, computers and some spare parts.

**Transom:** Stern section of the yacht.

**Turtle:** Special sail bag with zipper or flaps from which sails can be speedily hoisted.

**Under way:** The yacht is moving forward.

**Upwind:** Sailing towards the wind.

**Vang (Boom Vang):** Wire pulley system to hold the mainsail boom. Stops it angling up away from the deck.

**Weather helm:** When each gust tends to push the yacht up into the wind.

**Weather mark:** The mark to windward of the starting line. Must go into the wind to get there.

**Weather side:** Side of the yacht towards the wind.

**Winches:** Mechanical drums that tighten sheets and halyards.

**Wind shadow:** When the following yacht runs into disturbed air from the leader's sails.

**Wineglass:** A bad twist in the centre of the spinnaker. The resulting shape is like a wine glass.

**Wing mark:** The widest mark on the course after the first reach. The mark is out wide, like a wing.

**Windward:** Side from which wind is blowing.

**Wrap:** When the spinnaker is twisted around the forestay.

# Yachting Rules

THE following Rules are an abridged version from the International Yacht Racing Union 'Blue Book' which the 12 metres race under.

During the America's Cup Computer game any infringement of these rules will be deemed a 'Foul' by either the Challenger or Defender and the nature of the 'Foul' and the yacht penalised will be indicated on the screen.

The penalty for a "Foul" will be 4 boat lengths. Any Foul during starting manoeuvres and prior to the actual start will be paid after crossing the start line.

**1. A Port-Tack yacht shall keep clear of a Starboard-Tack Yacht (Rule 36)**

**2a. A Windward yacht shall keep clear of a Leeward yacht (Rule 37.1)**

**2b. A Leeward yacht may Luff as she pleases to hamper Windward yacht (Rule 38.1)**

**3. A yacht Clear Astern shall keep clear of a yacht Clear Ahead (Rule 37.2)**

**4. A right of way yacht shall not alter course to prevent the other yacht keeping clear. (Rule 35) (exception is rule 38.1 Luffing)**

**5. A yacht that is Tacking or Gybing shall keep clear of a yacht on a tack.**

**6. The outside yacht shall give an inside overlapping yacht room to round a mark.**

**7. At a starting mark the Leeward yacht does not give room to the Windward Barging yacht.**

**8. When both yachts Tack or Gybe at the same time, the one on the other's Port or left side, shall keep clear.**

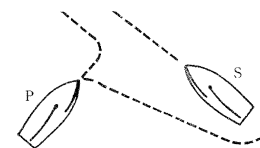
**9. A yacht that touches a mark/buoy must complete the rounding, then re-round the mark without touching it, keeping clear of other yacht.**

**10. A premature starter must return to the pre-race side of the line and start again. While returning she must keep clear of other yacht.**

**11. A yacht that is racing shall keep clear of a yacht recovering a man-overboard.**

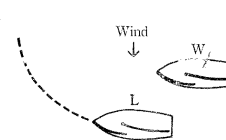
**12. Right of way yacht does not have to hit the other yacht to win a protest. If he has to avoid a collision the other yacht is wrong. No attempt to avoid a collision will result in the right of way yacht and the infringer being penalised.**

## 1. PORT AND STARBOARD



Yacht P must alter course to avoid yacht S either by *bearing away* behind her or tacking a safe distance away.

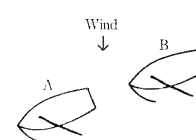
## 2a. WINDWARD & LEEWARD



Yacht W must not sail too close to Yacht L.

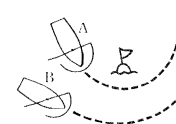
**2b.** Yacht L may *luff*, alter course to windward, as sharply as she pleases to stop W from overtaking.

## 3. CLEAR ASTERN. CLEAR AHEAD



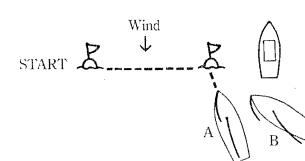
Yacht B must keep clear of Yacht A. If Yacht B is overtaking she must attempt to go *around* yacht A.

## 6. ROOM TO ROUND MARKS AND OBSTRUCTIONS



Yacht A is overlapping Yacht B. Yacht B must give A room to round.

## 7. BARGING AT THE START



Yacht B is said to be *barging*. Yacht A can maintain a close hauled cover and exclude yacht B who is not entitled to *roam* at a starting mark.